

Abstract

It comprises a mask (11) having a first, a second and a third action edge (11a, 11b, 11c), and a drive means for moving the mask (11) relative to a substrate (12) in a uniaxial direction (A) whereby moving the mask at a fixed rate of movement to cause the edges to successively act on an identical substrate region while successively applying different materials thereto forms thin films of three components successively with respective film thickness gradients oriented in three different directions mutually angularly spaced apart by an angle of 120° to allow these films to overlap, thereby forming a ternary phase diagrammatic thin film 13.